A photograph of a residential construction site. A row of brick houses is under construction, with extensive scaffolding covering the upper floors and roofs. The houses are built with red bricks and have dark grey tiled roofs. The ground in front of the houses is dirt and construction debris. A green dumpster is visible in the foreground on the right. The sky is clear and blue.

ECONOMY IN CONSTRUCTION

Class: B.Sc. (H.Sc.) 4th Semester

Subject: Fundamentals of Housing

Teacher: Dr. Rupinder Kaur Ghumman

INTRODUCTION



- ❧ There is a popular myth in the minds of many people today that whenever construction is accompanied by a low cost of materials being used, it will be of inferior quality. This is not necessarily true as it depends on the skill and intellect of the builder or civil engineer you hired.
- ❧ Low-cost construction is a term used to refer to creative and innovative ideas of planning your budget efficiently and not necessarily degrading the quality of materials been used for development.
- ❧ These 7 low-cost house construction techniques will help you cut down the House Construction Cost in India.

1. CHOOSING THE PERFECT PLOT



- ❧ Depth or height of plot w.r.t road is a significant factor in construction.
- ❧ If depth/height of plot is not up to road level on the front, then higher amount of filling is required.

❖ Opting for a plot that is neither too high nor too low compared to the height or depth of the road which will reduce the house construction cost to some level.

2. GO WITH PERFECT DESIGN



- ❧ Have a floor plan/layout that is square/rectangular formed (having lower perimeter).
- ❧ Square/rectangular formed floor plans typically consume lesser materials (20-40%).
- ❧ Designing your house with the help of a professional ensures that your house would save prices on materials and other works & require less maintenance in the future.

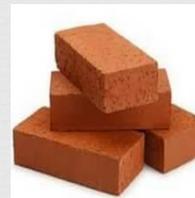


3. CONSTRUCTION MATERIALS ARE THE KEY



☞ Take quotes from the different sellers and then choose the one with the reasonable prices for different construction materials which will help in lowering the cost further.

☞ Whatever be the case, but don't ever compromise with the quality of construction material for a low cost.



Bricks



Cement



Concrete



Sand



Reinforcement



Glass



Plastic



Wood



Tiles

4. GO FOR RCC DOOR FRAMES & PVC DOORS



- ❧ Avoid wooden door frames due to their high costs and higher maintenance.
- ❧ Instead, opt for RCC door frames which might reduce the cost for Door framing.
- ❧ Use PVC doors for bathrooms and wet areas. 6

5. CHOOSE STAR RATED & BRANDED ELECTRICAL FIXTURES



- ❧ Go for branded wires for House wiring as it may reduce the recurring cost of repairing.
- ❧ You may save by selecting local build switches and sockets.
- ❧ Go for the fittings which are economical for you and which requires less maintenance.



6. CHOOSE ECONOMICAL SANITARY WARES



One-Piece WC

Two-Piece WC

European WC



Wall-Hung WC



Electronic WC



Squatting Pan

- ❧ One Piece WC are best option as they involve less repair or water leakage.
- ❧ But its cost is higher with respect to the Two-Piece WC and Indian Seat.
- ❧ However, the Indian seat is the most economical option.

7. GET TO KNOW CONTRACTOR



- ❧ Ask your relatives and neighbors about the best and budget-friendly contractors in your area.
- ❧ A resource full team can assist you to save time and guarantee quality at an economical price and hence can reduce the house construction cost.
- ❧ On the other hand, an inexperienced contractor could quote low at the start, however, can turn out to be pricey once you are going to be outlay on rectifications and maintenance.

8. GFRG PANELS ARE THE FUTURE



- ❧ Glass fibre reinforced gypsum is an Australian technology which can reduce house construction cost to 20-30%.
- ❧ Researchers from IIT Madras have found out that this technology can be used for all structural elements such as walls, floors, and roofs in a building.
- ❧ Use of GFRG Panels can significantly reduce the house construction cost.





THANK YOU